DOCUMENT RESUME

ED 213 887 CE 031 561

AUTHOR Kracht, Shannon
TITLE Painting. Pre-Apprenticeship Phase 2 Training. Instructor's Guide.
INSTITUTION Lane Community Coll., Eugene, Oreg.
SPONS AGENCY Employment and Training Administration (DOL), Washington, D.C.; Oregon State Dept. of Education, Salem.
PUB DATE 81
NOTE 52p.; For related documents see CE 031 562-579.

EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS Annotated Bibliographies; Behavioral Objectives; *Building Trades; *Painting (Industrial Arts); Postsecondary Education; Safety; Teaching Guides; *Trade and Industrial Education; Two Year Colleges
IDENTIFIERS *Preapprenticeship Programs

ABSTRACT

This instructor's guide accompanies the self-paced student training modules on painting available separately as CE 031 562. Introductory materials include a description of the components of the pre-apprenticeship project, discussion of teacher's role in students' completion of the modules, and scope and contents of Phase 2 training. Each of the 21 modules are briefly summarized according to this format: number of new vocabulary words; goal; performance indicators; overview and suggestions; description of any assignment(s) and/or job sheet(s) and listing of materials, tools, and equipment necessary to complete them; and supplementary references. An annotated bibliography contains references for further study and/or clarification of a topic. (YLB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED213887

PRE-APPRENTICESHIP

PHASE 2 TRAINING

Instructor's Guide

Painting

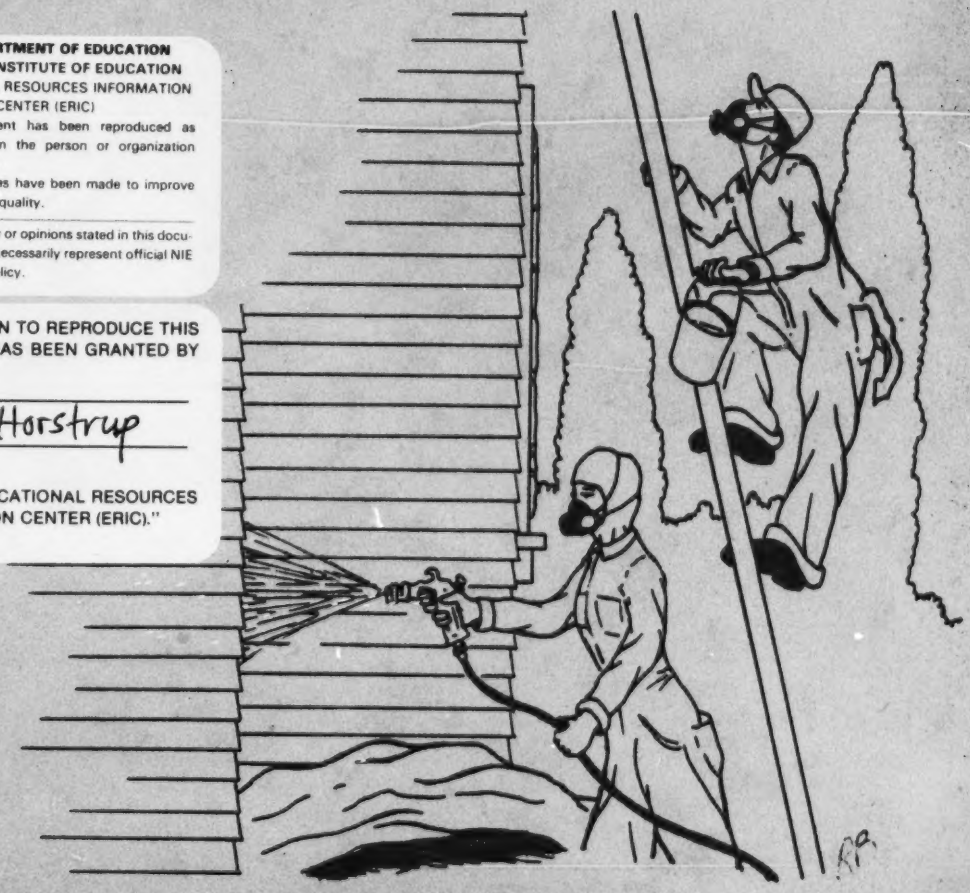
U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

- ☑ This document has been reproduced as received from the person or organization originating it.
- ☐ Minor changes have been made to improve reproduction quality.
- • Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

C. Horstrup

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."



CE035361

Painting Instructor's Guide Writer:
Shannon Kracht

Technical Assistance:
Ron Gillette, Steve Bosteder

Graphics: Ralph Bentley

Editorial, Proofreading and Pasteup:
Ron Hamblen, Debi Carroll

Typing:
Strandlien Typing Service

This project was developed under a subcontract for the Oregon Department of Education by Lane Community College, Community Education Division, Eugene, Oregon. Funds were provided by the Governor of Oregon from the Educational Linkages Component of the CETA Governor's Grant.

STATEMENT OF ASSURANCE

It is the policy of the Oregon Department of Education that no person be subjected to discrimination on the basis of race, national origin, religion, sex, age, handicap or marital status in any program, service or activity for which the Oregon Department of Education is responsible. The Department will comply with the requirements of state and federal law concerning nondiscrimination and will strive by its actions to enhance the dignity and worth of all persons.

Lane Community College

4000 E. 30th Avenue
Eugene, Oregon 97405
(503) 726-2200

Office of the President

July 27, 1981

On behalf of Lane Community College, I wish to express our pride and gratitude for the opportunity to participate in the development of the Pre-Apprenticeship training materials. We also wish to commend the Oregon Department of Education for its original concept and continued support; and, the Educational Linkages Component of the CETA Governor's Grant for funding.

The goals of this project are many, but none are more important than that of producing valid, understandable vocational curriculum material. We congratulate the tradespeople and production staff for thier accomplishments.

Finally, I recommend this material to anyone exploreing Pre-Apprenticeship as an entry into the vocational work world, with the hope and belief that it will go a long way toward producing skilled craftspeople who are dedicated to their work.

Sincerely,

Eldon G. Schafer

Lane Community College is an Equal Opportunity/Affirmative Action/Section 504/Title IX Institution

Phase II

INTRODUCTION

This is the second phase of a designed multi-phase project of pre-apprenticeship study. Phase II begins in earnest the development of manipulative skills essential to the trade. It re-introduces and elaborates on many of the tools, materials and equipment set forth in Phase I, and introduces projects and assignments designed to build trade knowledge and trade manipulative skills.

The project consists of three major components:

1) INSTRUCTOR'S GUIDE, containing a brief summary of each of the trade modules, including the materials, tools and equipment necessary to complete the Job Sheets and/or Assignments; an annotated bibliography for further study and/or clarification of a topic.

2) Self-paced LEARNING MODULES for student study. The modules are designed to impart trade knowledge and skills to the student. Each module is comprised of the following:
   a) Cover Sheet--lists module title, goals, performance indicators
   b) Study Guide--gives directions for completion of module
   c) Introduction (optional)--explains why the module is important
   d) Vocabulary--lists and defines any new trade terms or technical words necessary for understanding the module's content
   e) Supplementary References--details where to go for further study
   f) Information--provides information and graphics covering the module's topic(s)
   g) Self Assessment (optional)--provides students an opportunity to test their comprehension
   h) Assignment (optional)--enables students to research further into the topic
   i) Job Sheet (optional)--lists materials and tools necessary to complete the tasks which are designed to develop manipulative skill
   j) Post Assessment (optional)--enables the instructor to test student comprehension

3) SURVIVAL or COPING SKILLS MODULES have been developed to promote

social skills development. These 43 modules elaborate on the topics introduced in Phase I and cover such topics as: Losing your Driver's License, Death in the Family, Divorce, Time Management, Buying a Home, Maintaining Credit, and other social skills which have a bearing on the quality of work life and personal satisfaction.

IMPLEMENTATION

It is essential during Phase II that the student develop the skills necessary to perform the tasks of the trade as outlined and demonstrated in the modules. For this reason, the instruction should be conducted by a skilled craftsperson from the trade or occupation who has the necessary teaching skills.

At the completion of Phase II, the trainee will have enough experience with the occupation to decide whether to continue with the training into Phase III, which will ultimately represent a career choice and entrance into apprenticeship.

Recommendations for successful module completion

This phase of pre-apprenticeship study requires the student to develop job skills which will enable him or her to be a productive worker or to decide against pursuing the trade as a viable career choice. To that end, the instructor should:

1) Realize that skill-building and development is dependent on repeated physical performance and self-confidence.

2) Provide a setting in which students are encouraged to develop skills at their own individual pace. Assessments are designed as tests of comprehension, not as tests of skills or trade abilities.

3) Coordinate the use of materials, tools and equipment so that each student can fulfill his or her potential.

4) Ensure that each student practices the trade skills in the accepted manner, and practices enough to develop skills to a professional trade standard.

5) Make arrangements for visitations (to stores, shops, jobsites, etc.) and ensure that students participate fully.

6) Grade or comment on individual Assignments and Assessments, to ensure students are aware of their progress.

7) Ensure that the trade skills and knowledge presented in one module are fully understood by the student before allowing him or her to continue to subsequent modules.

SCOPE

Trades developed for study in Phase II include:

Drywall	Bricklaying
Painting	Parts Counter
Plumbing	*Electrical
Floor Laying	*Welding
Plastering	*Auto Mechanic
Cement Finishing	*Carpentry
Tilesetting	

* Adapted from previously developed ILS material.

CONTENTS

PAINT--INGREDIENTS AND CHARACTERISTICS
ABRASIVES USED IN PAINTING
PRIMER SELECTION
PREPARING WOOD SURFACES FOR PAINTING
WOOD IDENTIFICATION
PREPARING MASONRY SURFACES FOR PAINTING
PREPARING DRYWALL SURFACES FOR PAINTING
PREPARING METAL SURFACES FOR PAINTING
PAINTING SAFETY
PREPARING OIL-BASE PAINTS FOR APPLICATION
PREPARING LATEX PAINTS FOR APPLICATION
BRUSH SELECTION AND USE
PAINT ROLLER SELECTION AND USE
USING THE CONVENTIONAL SPRAY GUN FOR PAINTING
USING THE AIRLESS SPRAY SYSTEM FOR PAINTING
WOOD STAINS
CLEAR FINISHES
APPLYING CLEAR FINISHES
PAINT TROUBLES AND POOR PAINT JOBS
COLORS AND MIXING
BLUEPRINTS AND SPECIFICATIONS

MODULE TITLE: PAINT--INGREDIENTS AND CHARACTERISTICS

NUMBER IN SERIES: 1st of 21

NEW VOCABULARY WORDS: 9

GOAL: The student will be able to identify the ingredients found in paints and paint coverings, and explain their characteristics and common uses.

PERFORMANCE INDICATORS: The student will demonstrate knowledge of the subject by completing a Self Assessment and a Post Assessment.

OVERVIEW AND SUGGESTIONS: This module covers the basics of pigments, oils, latex, resins. It introduces the materials which make up paint, and explains how they interact.

ASSIGNMENT(S) DESCRIPTION AND MATERIALS REQUIRED:

No Assignment.

JOB SHEET DESCRIPTION AND MATERIALS AND TOOLS REQUIRED:

No Job Sheet.

SUPPLEMENTARY REFERENCES:

None.

MODULE TITLE: ABRASIVES USED IN PAINTING

NUMBER IN SERIES: 2nd of 21

NEW VOCABULARY WORDS: 0

GOAL: The student will be able to identify, select, explain and demonstrate the use of common abrasives used in painting.

PERFORMANCE INDICATORS: The student will complete a Self Assessment, a Job Sheet, and a Post Assessment.

OVERVIEW AND SUGGESTIONS: This module introduces the various kinds of abrasive paper used by painters and the numbering systems used to identify them. The Job Sheet requires the student to practice selecting and sanding wood objects. The objects may be used for priming and painting in a later module.

ASSIGNMENT(S) DESCRIPTION AND MATERIALS REQUIRED:

No Assignment.

JOB SHEET DESCRIPTION AND MATERIALS AND TOOLS REQUIRED:

The 2 tasks are designed to give the student the opportunity to practice sanding with a block and by hand. Required:

Selection of abrasive papers

Block

Flat and curved wood surfaces.

SUPPLEMENTARY REFERENCES:

Painting and Decorating Encyclopedia, pp. 46-48.

Painting and Decorating Craftsman's Manual & Textbook, pp. 289-291.

MODULE TITLE: PRIMER SELECTION

NUMBER IN SERIES: 3rd of 21

NEW VOCABULARY WORDS: 11

GOAL: The student will be able to identify, select and explain and characteristics of primers commonly used in the painting trade.

PERFORMANCE INDICATORS: The student will complete an Assignment and a Post Assessment.

OVERVIEW AND SUGGESTIONS: This module covers primers within the confines of a painting system--which primers are used on certain surfaces, etc. The Assignment requires the students to visit a paint store to do some research. The instructor may arrange for a class visit.

ASSIGNMENT(S) DESCRIPTION AND MATERIALS REQUIRED:

The assignment is for the students to visit a paint store and research various primers. Ensure that the students are equipped with paper and pencil.

JOB SHEET DESCRIPTION AND MATERIALS AND TOOLS REQUIRED:

No Job Sheet.

SUPPLEMENTARY REFERENCES:

Painting and Decorating Encyclopedia, pp. 87-88.

Painting and Decorating Craftsman's Manual & Textbook, pp. 127-129, 133.

MODULE TITLE: PREPARING WOOD SURFACES FOR PAINITNG

NUMBER IN SERIES: 4th of 21

NEW VOCABULARY WORDS: 9

GOAL: The student will be able to identify, explain and demonstrate the steps necessary to prepare wood surfaces for painting.

PERFORMANCE INDICATORS: The student will complete a Self Assessment, five tasks on a Job Sheet and a Post Assessment.

OVERVIEW AND SUGGESTIONS: This module covers the various steps and precautions in preparing wood (interior and exterior) for a professional paint job. The prepared wood may be used as painting projects in later modules. Of particular importance is the fact that the student should practice with as many different materials (spackle, caulk, etc.) as possible.

ASSIGNMENT(S) DESCRIPTION AND MATERIALS REQUIRED:

No Assignment.

JOB SHEET DESCRIPTION AND MATERIALS AND TOOLS REQUIRED:

The Job Sheet requires students to repair cracks and holes with various filler materials. Requires:

Fixall (or other brand), water, pail, putty knife, D-Grade plywood, abrasive papers, spackle, broad knife, primed wood, caulking gun or tube.

SUPPLEMENTARY REFERENCES:

Painting and Decorating Encyclopedia, pp 75-86.

Painting and Decorating Craftsman's Manual and Textbook, pp. 451-459.

MODULE TITLE: WOOD IDENTIFICATION--PAINTING

NUMBER IN SERIES: 5th of 21

NEW VOCABULARY WORDS: 5

GOAL: The student will be able to identify and explain the characteristics of woods commonly painted in the Northwest.

PERFORMANCE INDICATORS: The student will complete a Self Assessment, 3 Assignments and a Post Assessment.

OVERVIEW AND SUGGESTIONS: Wood identification--hard, soft, open- or close-grained, is necessary to the trade. The instructor should emphasize the importance and quiz students on the types of wood used throughout the course.

ASSIGNMENT(S) DESCRIPTION AND MATERIALS REQUIRED:

There are 3 Assignments. One requires the instructor to present at least 10 types (species) of wood to the class and quiz students on their type. The 3rd Assignment requires students to visit a site or house and identify wood types. The instructor may arrange for the visit.

JOB SHEET DESCRIPTION AND MATERIALS AND TOOLS REQUIRED:

No Job Sheet.

SUPPLEMENTARY REFERENCES:

Painting and Decorating Encyclopedia, pp. 111-113.

MODULE TITLE: PREPARING MASONRY SURFACES FOR PAINTING

NUMBER IN SERIES: 6th of 21

NEW VOCABULARY WORDS: 9

GOAL: The student will be able to identify and demonstrate the steps involved in preparing common masonry surfaces to receive paint.

PERFORMANCE INDICATORS: The student will complete 2 Assignments, a Job Sheet and a Post Assessment.

OVERVIEW AND SUGGESTIONS: This module covers new plaster, painted plaster, new and old concrete, brick, cement block and stucco. It requires students to select appropriate "patchers" for the masonry surfaces and demonstrate the proper techniques for using them.

ASSIGNMENT(S) DESCRIPTION AND MATERIALS REQUIRED:

There are two Assignments, one requiring the students to do research at a paint store, the other at a construction site where new plaster or stucco walls are to be painted. The instructor should arrange for the construction site visit, and may arrange for the paint store visit. The instructor should lead the class discussion after returning.

JOB SHEET DESCRIPTION AND MATERIALS AND TOOLS REQUIRED:

The 2 tasks on the Job Sheet require the students to practice removing and replacing mortar, and to fill and feather cracks and holes in plaster.

Requires:

Cement mortar mix, board, pointing trowel, chisel or knife, small brick structure, patching plaster, broad knife or putty knife, plaster wall or object needing repair.

SUPPLEMENTARY REFERENCES:

Painting and Decorating Encyclopedia, pp. 78-82.

Painting and Decorating Craftsman's Manual and Textbook, pp. 124-127, 456-461.

MODULE TITLE: PREPARING DRYWALL SURFACES FOR PAINTING

NUMBER IN SERIES: 7th of 21

NEW VOCABULARY WORDS: 5

GOAL: The student will be able to identify, explain and demonstrate the steps involved in preparing drywall material for painting.

PERFORMANCE INDICATORS: The student will complete 2 Assignments and a Post Assessment.

OVERVIEW AND SUGGESTIONS: This module covers the basics of drywall use and preparation. The instructor may wish to allow students to nail, tape and apply joint compound to a small project just to get a feel for it.

ASSIGNMENT(S) DESCRIPTION AND MATERIALS REQUIRED:

The Assignments require the students to become familiar with drywall work. The instructor should arrange a visit to a residential or commercial site where drywall installing and taping is taking place. The instructor is also required to present to the class several thicknesses of drywall material.

JOB SHEET DESCRIPTION AND MATERIALS AND TOOLS REQUIRED:

No Job Sheet.

SUPPLEMENTARY REFERENCES:

Painting and Decorating Encyclopedia, pp. 79-80.

Painting and Decorating Craftsman's Manual and Textbook, pp. 603-623.

MODULE TITLE: PREPARING METAL SURFACES FOR PAINTING

NUMBER IN SERIES: 8th of 21

NEW VOCABULARY WORDS: 5

GOAL: The student will be able to explain and demonstrate the proper procedures for preparing metal surfaces to receive paint.

PERFORMANCE INDICATORS: The student will complete an Assignment, a Job Sheet and a Post Assessment.

OVERVIEW AND SUGGESTIONS: This module covers the basics of preparing common metals, including tools and materials.

ASSIGNMENT(S) DESCRIPTION AND MATERIALS REQUIRED:

The Assignment page requires the students to visit a paint store and research metal cleaners/preparers, then to give a report, written or oral, on their findings to the instructor.

JOB SHEET DESCRIPTION AND MATERIALS AND TOOLS REQUIRED:

The Job Sheet requires students to clean scaled metal and prepare it to receive paint. Requires:

Wire brush, blow torch, metal which is heavy with scale.

SUPPLEMENTARY REFERENCES:

Painting and Decoration Encyclopedia, pp. 82-85.

Painting and Decorating Craftsman's Manual and Textbook, pp. 461-463.

MODULE TITLE: PAINTING SAFETY

NUMBER IN SERIES: 9th of 21

NEW VOCABULARY WORDS: 0

GOAL: The student will identify and practice common safety techniques in using tools, equipment, ladders, scaffolds, etc.

PERFORMANCE INDICATORS: The student will complete an Assignment and a Post Assessment.

OVERVIEW AND SUGGESTIONS: This module lists general and specific rules in the areas of scaffolds and ladders, equipment, materials, tools, and respecting the property of others. The instructor should make sure that all students work safely all the time, and that safety is emphasized along with skill building.

ASSIGNMENT(S) DESCRIPTION AND MATERIALS REQUIRED:

The Assignment requires the students to visit a painting site and note safe and unsafe practices, then turn their findings in to the instructor. The instructor may accompany the student(s) and arrange for a visit.

JOB SHEET DESCRIPTION AND MATERIALS AND TOOLS REQUIRED:

No Job Sheet.

SUPPLEMENTARY REFERENCES:

None.

MODULE TITLE: PREPARING OIL-BASE PAINTS FOR APPLICATION

NUMBER IN SERIES: 10th of 21

NEW VOCABULARY WORDS: 0

GOAL: The student will be able to identify solvents and thinners commonly used for preparing oil-base paints, explain safety factors and demonstrate preparation techniques.

PERFORMANCE INDICATORS: The student will complete an Assignment, a Job Sheet and a Post Assessment.

OVERVIEW AND SUGGESTIONS: Describes how oil-based paint is prepared for application; students should receive enough practice to become proficient.

ASSIGNMENT(S) DESCRIPTION AND MATERIALS REQUIRED:

The Assignment calls for students to visit a paint products store and identify solvents and thinners used for thinning 4 major brands of paint. The instructor may schedule a visit with the paint store; instructor may keep students' findings in a file for future reference.

JOB SHEET DESCRIPTION AND MATERIALS AND TOOLS REQUIRED:

The Job Sheet requires the students to thin and prepare paint. Requires:

New can of paint, paint with "skin" on surface, appropriate thinner, pail, stirring stick.

SUPPLEMENTARY REFERENCES:

Painting and Decorating Encyclopedia, pp. 38-40.

ILS Module: 2300-18 Solvents and Thinners.

MODULE TITLE: PREPARING LATEX PAINTS FOR APPLICATION

NUMBER IN SERIES: 11th of 21

NEW VOCABULARY WORDS: 2

GOAL: The student will be able to identify common latex paints and explain and demonstrate their preparation.

PERFORMANCE INDICATORS: The student will complete an Assignment and a Post Assessment.

OVERVIEW AND SUGGESTIONS: This module introduces latex paints; the Assignment provides students an opportunity to become familiar with different types and their uses.

ASSIGNMENT(S) DESCRIPTION AND MATERIALS REQUIRED:

Requires the students to read supplementary references or to visit a paint store, and write a short report.

JOB SHEET DESCRIPTION AND MATERIALS AND TOOLS REQUIRED:

No Job Sheet.

SUPPLEMENTARY REFERENCES:

Painting and Decorating Craftsman's Manual and Textbook, pp. 72-74, 141-147.

ILS Module: 2300-6 Water Base Paints and Their Application

MODULE TITLE: BRUSH SELECTION AND USE

NUMBER IN SERIES: 12th of 21

NEW VOCABULARY WORDS: 5

GOAL: The student will identify, select and demonstrate the correct use of brushes commonly used in the painting trade.

PERFORMANCE INDICATORS: The student will complete a Self Assessment and will practice 9 painting projects until he or she can apply a professional finish.

OVERVIEW AND SUGGESTIONS: This module is the beginning of actual application practice. It is important that each student practice with all the tools and materials described. The instructor should make sure there are sufficient brushes to enable students to work with all types on many projects.

ASSIGNMENT(S) DESCRIPTION AND MATERIALS REQUIRED:

No Assignment.

JOB SHEET DESCRIPTION AND MATERIALS AND TOOLS REQUIRED:

The tasks on the Job Sheet require students to practice applying various materials with various brushes on various surfaces, all to a professional finish. Consult Job Sheet in module for lists of materials and tools required.

SUPPLEMENTARY REFERENCES:

Painting and Decorating Encyclopedia, pp. 49-55, 105-118.

ILS Module: 2300-12 The Use and Care of the Paint Brush.

MODULE TITLE: PAINT ROLLER SELECTION AND USE

NUMBER IN SERIES: 13th of 21

NEW VOCABULARY WORDS: 3

GOAL: The student will be able to select and demonstrate the use of the proper roller for a given job.

PERFORMANCE INDICATORS: The student will complete an Assignment, 2 tasks on a Job Sheet, and a Post Assessment. The Job Sheet tasks will be done to a professional finish.

OVERVIEW AND SUGGESTIONS: This module covers the selection, types and techniques of using paint rollers. The instructor should ensure an adequate supply of rollers is available for individual practice.

ASSIGNMENT(S) DESCRIPTION AND MATERIALS REQUIRED:

The Assignment requires students to visit a paint store and make a report on roller nap covers. The instructor may keep the reports for the students' future reference.

JOB SHEET DESCRIPTION AND MATERIALS AND TOOLS REQUIRED:

The Job Sheet tasks require the students to practice applying paint to various surfaces with a roller. Requires:

Linseed oil, flat and enamel latex paints, oil-base paint, thinner, paint trays, 9" rollers of various nap lengths and materials, the following four surfaces prepared to receive paint--brick structure, block structure, plaster wall, wood surface.

SUPPLEMENTARY REFERENCES:

Painting and Decorating Encyclopedia, pp. 56-57, 100, 110, 123.

Painting and Decorating Craftsman's Manual and Textbook, pp. 227-240.

MODULE TITLE: USING THE CONVENTIONAL SPRAY GUN FOR PAINTING

NUMBER IN SERIES: 14th of 21

NEW VOCABULARY WORDS: 7

GOAL: The student will identify and demonstrate the steps in operating a conventional spray unit.

PERFORMANCE INDICATORS: The student will complete a Job Sheet consisting of 2 tasks, and will complete a Post Assessment. The Job Sheet will be completed to a professional finish.

OVERVIEW AND SUGGESTIONS: This module covers the steps involved in operating and cleaning spray equipment.

ASSIGNMENT(S) DESCRIPTION AND MATERIALS REQUIRED:

No Assignment.

JOB SHEET DESCRIPTION AND MATERIALS AND TOOLS REQUIRED:

The Job Sheet requires the student to adjust, fill and use spray equipment.

Requires:

Spray equipment unit, various tip sizes (internal and external mix), latex paint, lacquer, varnish, enamel, house paint, solvents, flat wood surface.

SUPPLEMENTARY REFERENCES:

Painting and Decorating Encyclopedia, pp. 129-135.

ILS Module: 2300-13 The Use of the Spray Gun.

MODULE TITLE: USING THE AIRLESS SPRAY SYSTEM FOR PAINTING

NUMBER IN SERIES: 15th of 21

NEW VOCABULARY WORDS: 5

GOAL: The student will be able to identify and select proper airless spray equipment, and will demonstrate its use.

PERFORMANCE INDICATORS: The student will complete an a Assignment on tip orifice sizes, a Job Sheet on application techniques, and a Post Assessment. The Job Sheet will be done to a professional finish.

OVERVIEW AND SUGGESTIONS: The instructor should coordinate the course progress so each student receives adequate practice time on the airless equipment.

ASSIGNMENT(S) DESCRIPTION AND MATERIALS REQUIRED:

The Assignment requires students to identify tip sizes to be used for various materials and to give the results to the instructor. The instructor should ensure that the reference (or one like it) is available for student use. The Assignment sheets should be set aside for future reference.

JOB SHEET DESCRIPTION AND MATERIALS AND TOOLS REQUIRED:

SUPPLEMENTARY REFERENCES:

Painting and Decorating Encyclopedia, pp. 135-136.

Painting and Decorating Craftsman's Manual and Textbook, pp. 245-268.

Grayco, Inc.: A Catalog for the Professional Painting Contractor.

MODULE TITLE: WOOD STAINS

NUMBER IN SERIES: 16th of 21

NEW VOCABULARY WORDS: 6

GOAL: The student will identify and explain the use and characteristics of common stains, and will demonstrate their use.

PERFORMANCE INDICATORS: The student will complete an Assignment, a Job Sheet and a Post Assessment. The tasks on the Job Sheet will be completed to a professional finish.

OVERVIEW AND SUGGESTIONS: This module covers various types of stains and how they are used in the painting trade. The instructor should make sure that a wide range of types and colors are available for student use. The projects completed on the Job Sheet may be used for projects in the 18th module of this series, "Applying Clear Finishes."

ASSIGNMENT(S) DESCRIPTION AND MATERIALS REQUIRED:

There are 2 Assignments for this module. The instructor should grade them carefully to make sure the student has a good understanding.

JOB SHEET DESCRIPTION AND MATERIALS AND TOOLS REQUIRED:

The Job Sheet requires the student to stain a number of wood objects. The instructor should ensure that suitable wood objects are available for the class. Requires:

Spirit stain, water stain, penetrating oil stain, brushes, conventional spray system, fine abrasive papers, clean rags, shellac, thinner, clean containers, unfinished furniture.

SUPPLEMENTARY REFERENCES:

Painting and Decorating Encyclopedia, pp. 191-193.
ILS Module: 2300-3 Water Stains and Applications.
Complete Book of Woodfinishing, pp. 72-87.

MODULE TITLE: CLEAR FINISHES

NUMBER IN SERIES: 17th of 21

NEW VOCABULARY WORDS: 10

GOAL: The student will be able to identify, select and explain the use of clear finishes commonly used by painters.

PERFORMANCE INDICATORS: The student will successfully complete a Self Assessment, an Assignment and a Post Assessment.

OVERVIEW AND SUGGESTIONS: This module introduces clear finishes--shellac, varnishes, lacquers, etc. "Applying Clear Finishes," the 18th module of the series, should follow the completion of this module.

ASSIGNMENT(S) DESCRIPTION AND MATERIALS REQUIRED:

The Assignment requires students to visit a paint store to research clear finishes, then to return to class, discuss their findings and complete a short assignment.

JOB SHEET DESCRIPTION AND MATERIALS AND TOOLS REQUIRED:

No Job Sheet.

SUPPLEMENTARY REFERENCES:

Painting and Decorating Craftsman's Manual and Textbook, pp. 116-124.

MODULE TITLE: APPLYING CLEAR FINISHES

NUMBER IN SERIES: 18th of 21

NEW VOCABULARY WORDS: 0

GOAL: The student will identify, explain and demonstrate the steps involved in applying clear finishes.

PERFORMANCE INDICATORS: The student will complete a Self Assessment and a Job Sheet, which is comprised of tasks which must be completed to a professional finish.

OVERVIEW AND SUGGESTIONS: This module covers the techniques of applying clear finishes. The objects stained as projects in the "Wood Stains" module may be used as project material for this module's Job Sheet.

ASSIGNMENT(S) DESCRIPTION AND MATERIALS REQUIRED:

No Assignment.

JOB SHEET DESCRIPTION AND MATERIALS AND TOOLS REQUIRED:

The Job Sheet requires students to apply clear finishes to objects. Requires: Lacquer, varnish, shellac, thinners, brushes, abrasive papers, tack rag, spirit and water stain (optional), clean containers, paste wood filler, chairs, tables, etc., felt, finishing oil, pumice.

SUPPLEMENTARY REFERENCES:

Painting and Decorating Encyclopedia, pp. 194-201.

MODULE TITLE: PAINT TROUBLES AND POOR PAINT JOBS

NUMBER IN SERIES: 19th of 21

NEW VOCABULARY WORDS: 3

GOAL: The student will be able to identify common paint failures and explain the probable causes of failure.

PERFORMANCE INDICATORS: The student will complete an Assignment and a Post Assessment.

OVERVIEW AND SUGGESTIONS:

Covers chalking, wrinkling, alligatoring, cracking, blistering, and methods of correcting problems. This module can be used earlier in the course.

ASSIGNMENT(S) DESCRIPTION AND MATERIALS REQUIRED:

The Assignment requires students to find examples of common paint problems.

JOB SHEET DESCRIPTION AND MATERIALS AND TOOLS REQUIRED:

No Job Sheet.

SUPPLEMENTARY REFERENCES:

Painting and Decorating Craftsman's Manual and Textbook, pp. 517-559.

MODULE TITLE: COLORS AND MIXING

NUMBER IN SERIES: 20th of 21

NEW VOCABULARY WORDS: 3

GOAL: The student will be able to explain the basics of color perception, and demonstrate proper coloring/tinting techniques.

PERFORMANCE INDICATORS: The student will complete a Job Sheet, an Assignment and a Post Assessment.

OVERVIEW AND SUGGESTIONS:

This module covers color and pigments and lists the procedure for tinting base paints. This module may be used earlier in the series. The instructor should have various color chips and universal tints available for student use. The paint that is tinted as a project on the Job Sheet may be used on projects in earlier modules.

ASSIGNMENT(S) DESCRIPTION AND MATERIALS REQUIRED:

The Assignment requires students to locate a reference which lists many colors and interpret the given name to common "lay" color descriptions, and to compare and try to match color chips from different paint companies or manufacturers.

JOB SHEET DESCRIPTION AND MATERIALS AND TOOLS REQUIRED:

The Job Sheet calls for practice in matching colors. Requires:

Universal tints, bases, clean containers, color chips or painted surfaces.

SUPPLEMENTARY REFERENCES:

Painting and Decorating Encyclopedia, pp. 145-170.

Painting and Decorating Craftsman's Manual and Textbook, pp. 375-434.

MODULE TITLE: BLUEPRINTS AND SPECIFICATIONS

NUMBER IN SERIES: 21st of 21

NEW VOCABULARY WORDS: 0

GOAL: The student will explain the general parts which make up a whole set of plans, and will interpret specific parts of the plans. Students will also explain and interpret painting specifications.

PERFORMANCE INDICATORS: The student will successfully complete an Assignment and Post Assessment.

OVERVIEW AND SUGGESTIONS: The instructor should provide as many different types of prints as possible to ensure a thorough understanding by the students. This module may be used earlier in the series.

ASSIGNMENT(S) DESCRIPTION AND MATERIALS REQUIRED:

The Assignment requires students to research a set of working drawings for a house or duplex. The instructor should provide the prints for the students and should lead any class discussion.

JOB SHEET DESCRIPTION AND MATERIALS AND TOOLS REQUIRED:

No Job Sheet.

SUPPLEMENTARY REFERENCES:

None.

BIBLIOGRAPHY

PAINTING AND DECORATING ENCYCLOPEDIA
Goodheart-Willcox Co., Inc.
South Holland, Illinois
(1973)

Described as "a complete library of professional know-how on painting, decorating and wood finishing in one easy-to-use volume." It is. Covers the range of painting know-how and skills, although there is more than is needed for pre-apprenticeship on pigments, vehicles, etc., and on color and color harmony. Graphics are good, colored chips are included in color chart. A valuable reference tool for instructor and student; used by many apprenticeship classes.

PAINTING AND DECORATING CRAFTSMAN'S MANUAL AND TEXTBOOK
Painting and Decorating Contractors of America
7223 Lee Highway
Falls Church, VA. 22046
(1975)

An "in-depth" study of the history and standards of the profession, how-to-do, etc. Contains photos and graphics of tools, but few practical graphics of actual applications. In many respects, this Manual closely resembles the Goodheart-Willcox publication; this one is very complete. It is written for an audience with an advanced skill level and very good reading ability. A lot of advanced techniques covered; written for someone at journeyman level.

BIBLIOGRAPHY

PAINTING I AND II (CORRESPONDENCE)
Military Curricula for Vocational and Technical Education
Ohio State University

This material covers the spectrum, including military painting, how to use equipment, safety procedures, etc. It is older material, but painting basics have not changed, even though new materials have been developed which make some of the reading matter obsolete. Some of the materials would make good handouts for students. Graphics are all rough drawings and poor quality photos.

ILS MODULES
(Available from: PSU/DCE
Community Services
P.O. Box 1394
Portland, OR 97207)

There are a series of modules available which covers paintings and related operations. New technology and adapted trade standards in the Northwest have outdated some of the material. It remains, nevertheless, a good source of reasonably easy-to-follow material for students.

BIBLIOGRAPHY

Manufacturers' catalogs and manuals

These pamphlets and spec sheets are available from any painting supply store. The cost is usually minimal. Of importance are those covering specs, adjustments, etc. for spray equipment, airless or conventional. The student should be required to read and study a manual for setting, adjusting, filling, operating and cleaning equipment before using it.